O.I.P.E JC25 JUL 21 2004 PATENT & TRADEMARK OFFICE

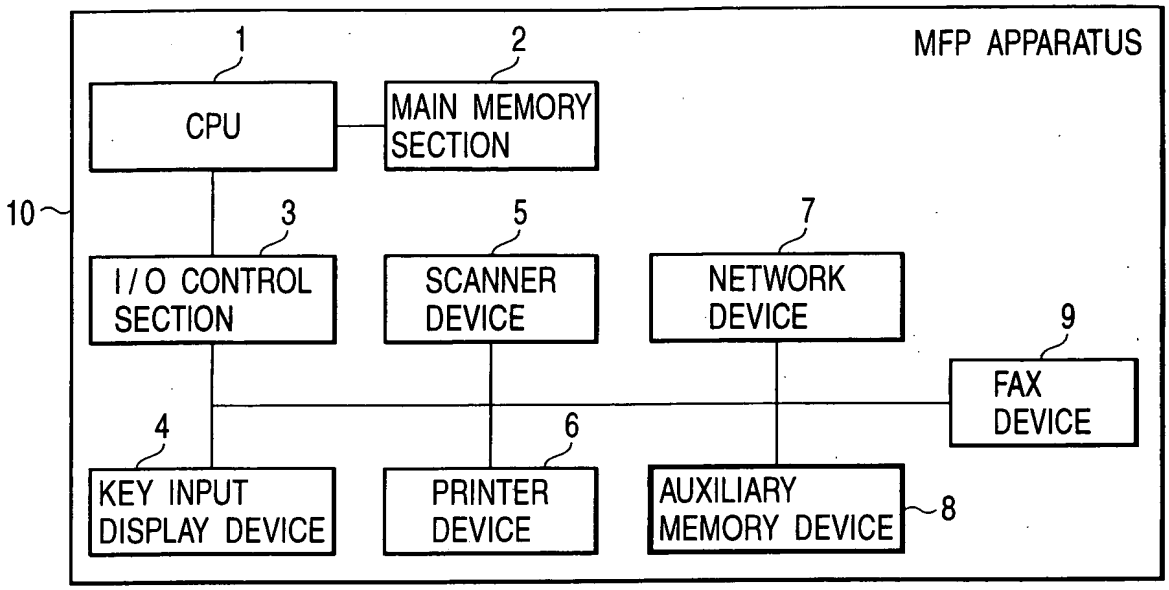

FIG. 1

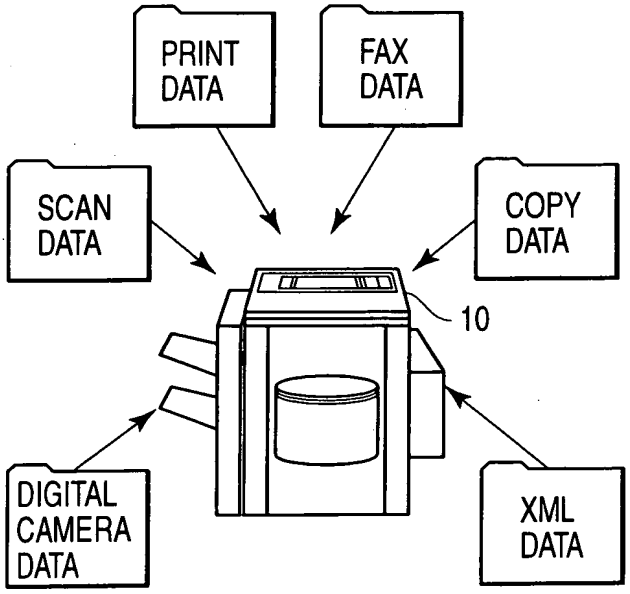

FIG. 2

PRINT SETTING / DEFINITION OF ENTIRE JOB
PRINT SETTING / DEFINITION OF FIRST PAGE
IMAGE RENDERING COMMANDS OF FIRST PAGE
IMAGE RENDERING COMMANDS OF SECOND PAGE
IMAGE RENDERING COMMANDS OF THIRD PAGE
PRINT SETTING / DEFINITION OF FOURTH PAGE
IMAGE RENDERING COMMANDS OF FOURTH PAGE
⋮
PRINT SETTING / DEFINITION OF N-TH PAGE
IMAGE RENDERING COMMANDS OF N-TH PAGE

FIG. 3

OIPE
JUL 21 2004
PATENT & TRADEMARK OFFICE 2825

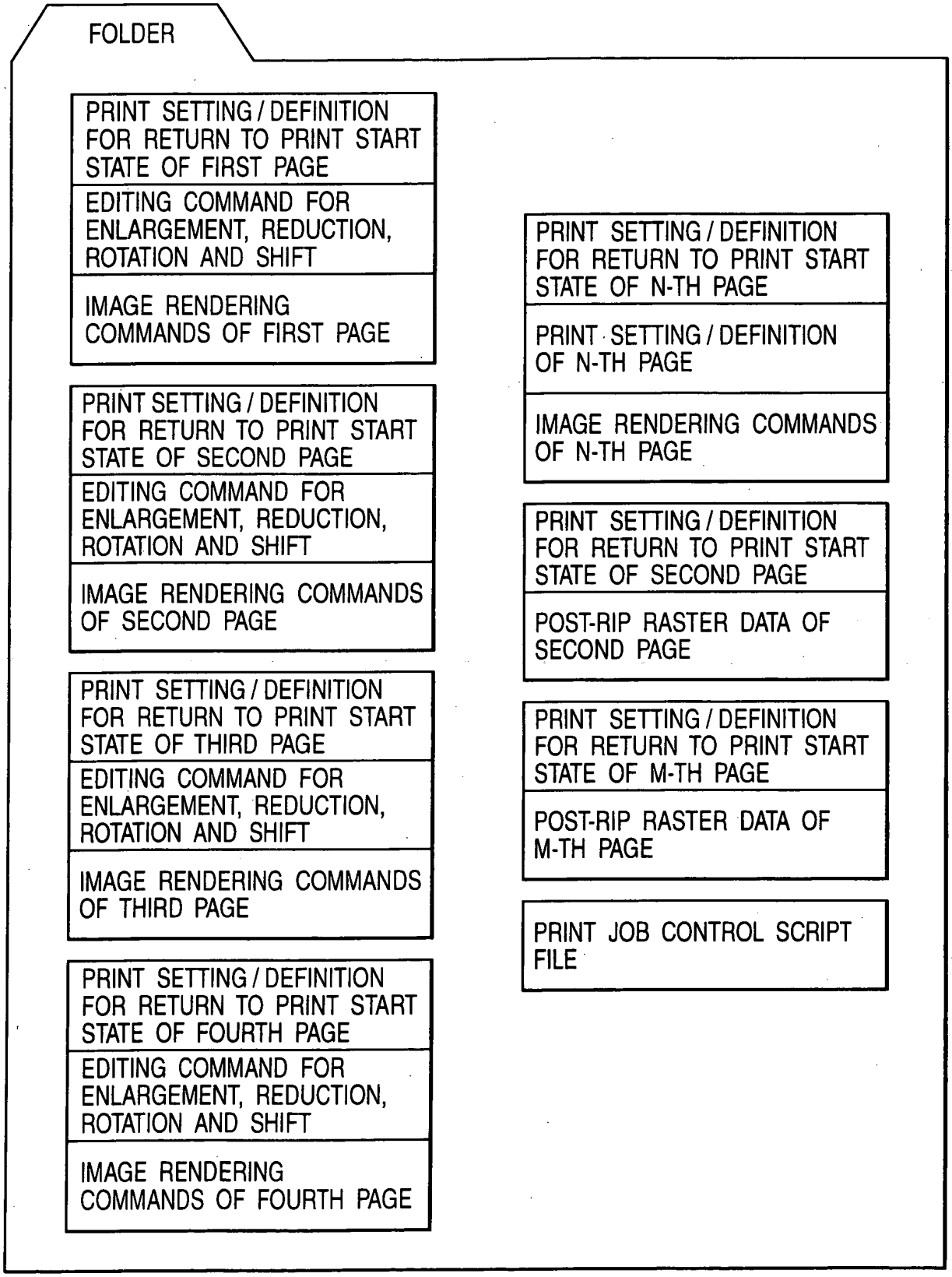

FIG. 4

PATENT & TRADEMARK OFFICE JUL 21 2004 JC25

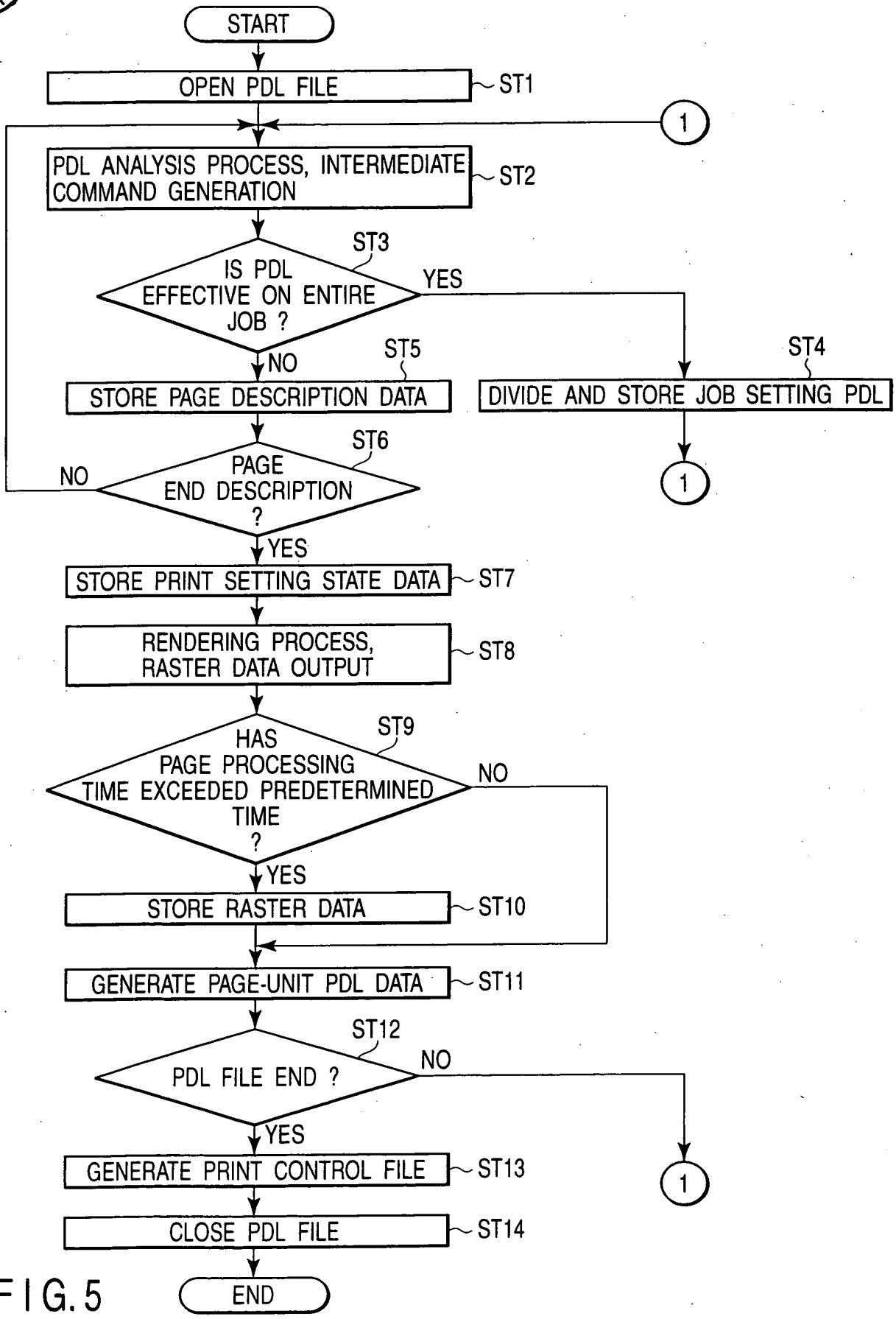

FIG. 5

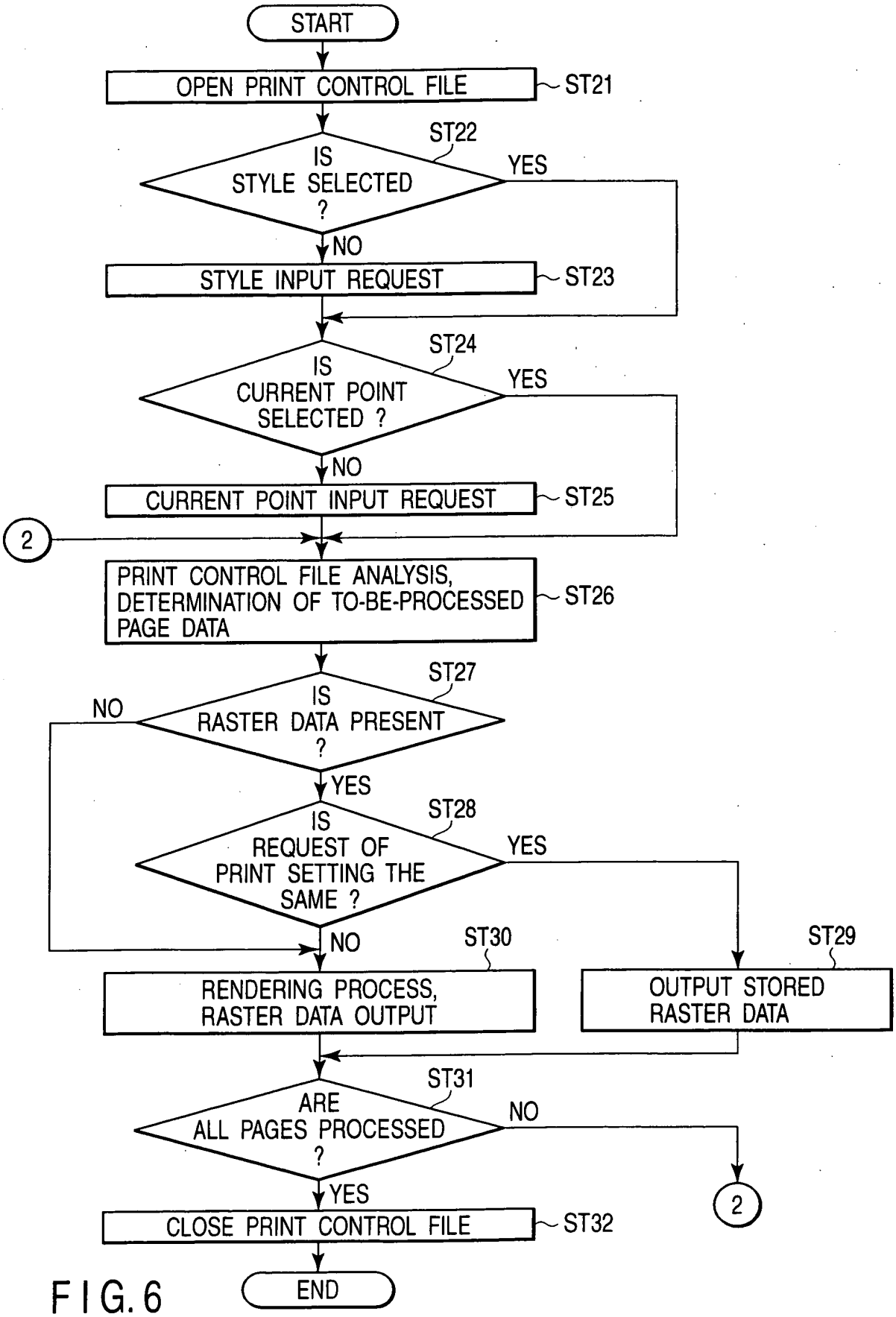
START
OPEN PRINT CONTROL FILE
ST21
ST22
IS STYLE SELECTED ?
YES
NO
STYLE INPUT REQUEST
ST23
ST24
IS CURRENT POINT SELECTED ?
YES
NO
CURRENT POINT INPUT REQUEST
ST25
2
PRINT CONTROL FILE ANALYSIS, DETERMINATION OF TO-BE-PROCESSED PAGE DATA
ST26
ST27
IS RASTER DATA PRESENT ?
NO
YES
ST28
IS REQUEST OF PRINT SETTING THE SAME ?
YES
NO
ST30
ST29
RENDERING PROCESS, RASTER DATA OUTPUT
OUTPUT STORED RASTER DATA
ST31
ARE ALL PAGES PROCESSED ?
NO
YES
2
CLOSE PRINT CONTROL FILE
ST32
END

FIG. 6

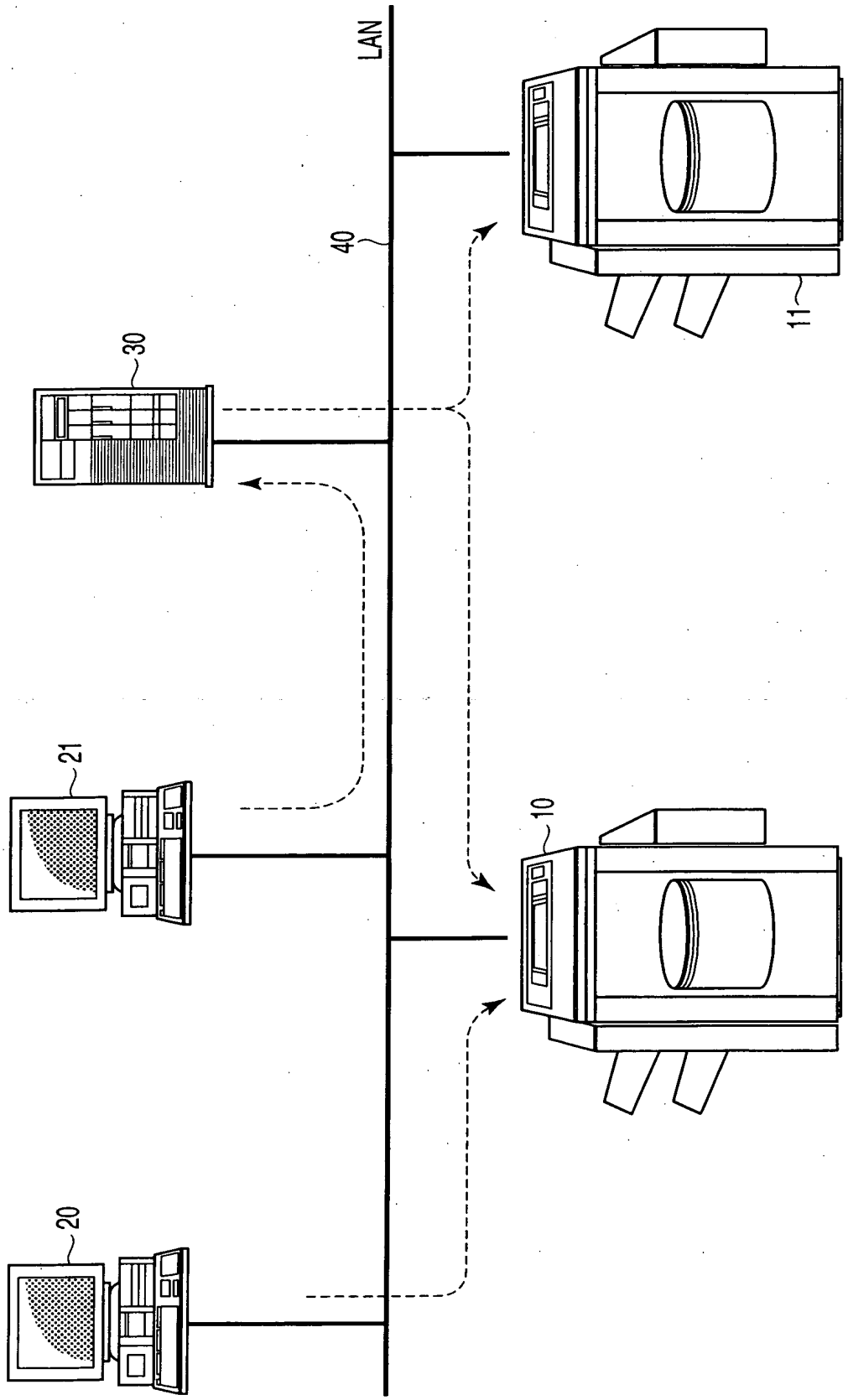

FIG.7

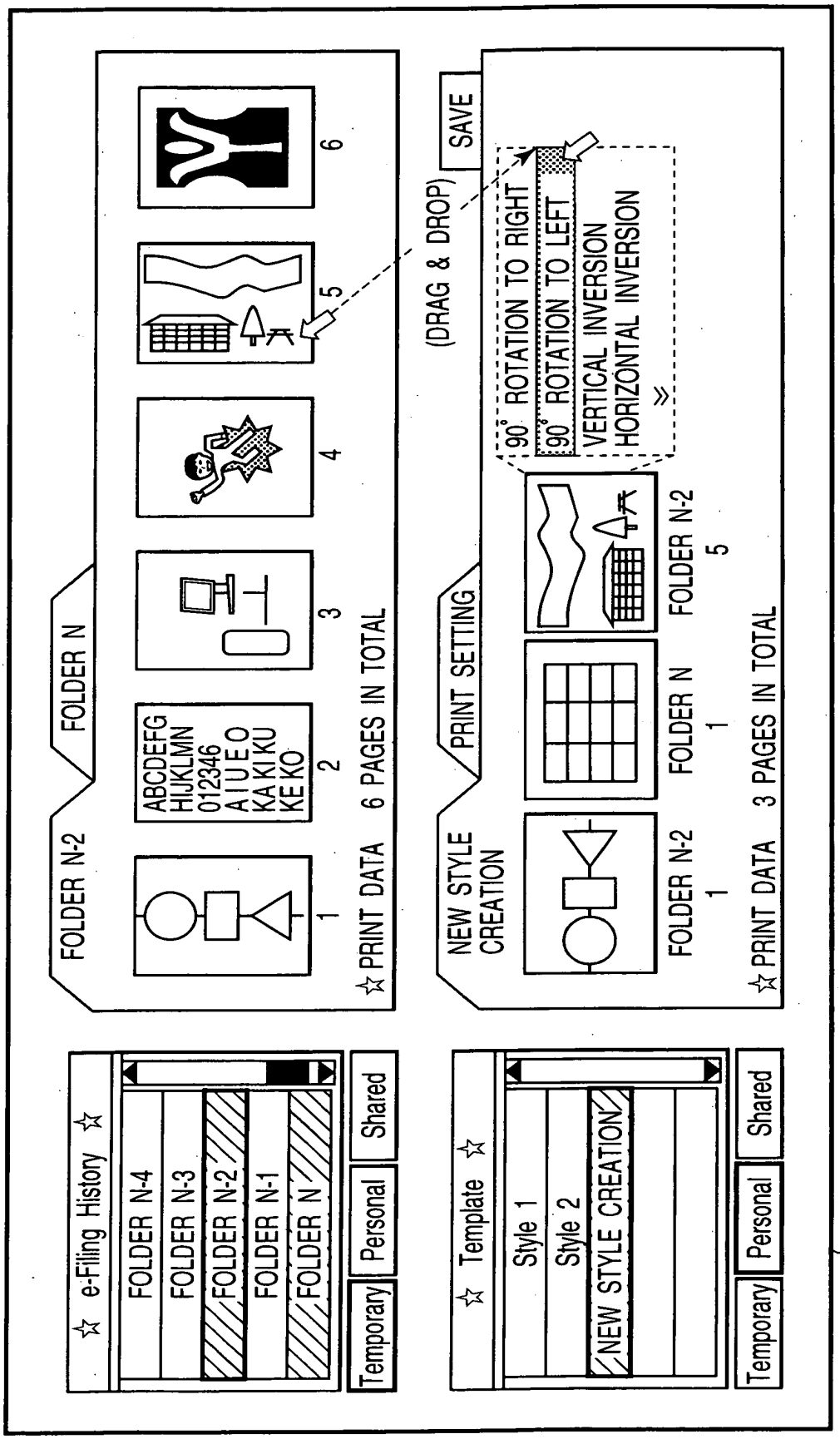
FOLDER N-2
FOLDER N
ABCDEFG
HIJKLMN
012346
AIUEO
KAKIKU
KEKO
1
2
3
4
5
6
☆ PRINT DATA 6 PAGES IN TOTAL
(DRAG & DROP)
SAVE
PRINT SETTING
NEW STYLE CREATION
90° ROTATION TO RIGHT
90° ROTATION TO LEFT
VERTICAL INVERSION
HORIZONTAL INVERSION
FOLDER N-2 1
FOLDER N 1
FOLDER N-2 5
☆ PRINT DATA 3 PAGES IN TOTAL
☆ e-Filing History ☆
FOLDER N-4
FOLDER N-3
FOLDER N-2
FOLDER N-1
FOLDER N
Temporary
Personal
Shared
☆ Template ☆
Style 1
Style 2
NEW STYLE CREATION
Temporary
Personal
Shared
4

FIG. 8

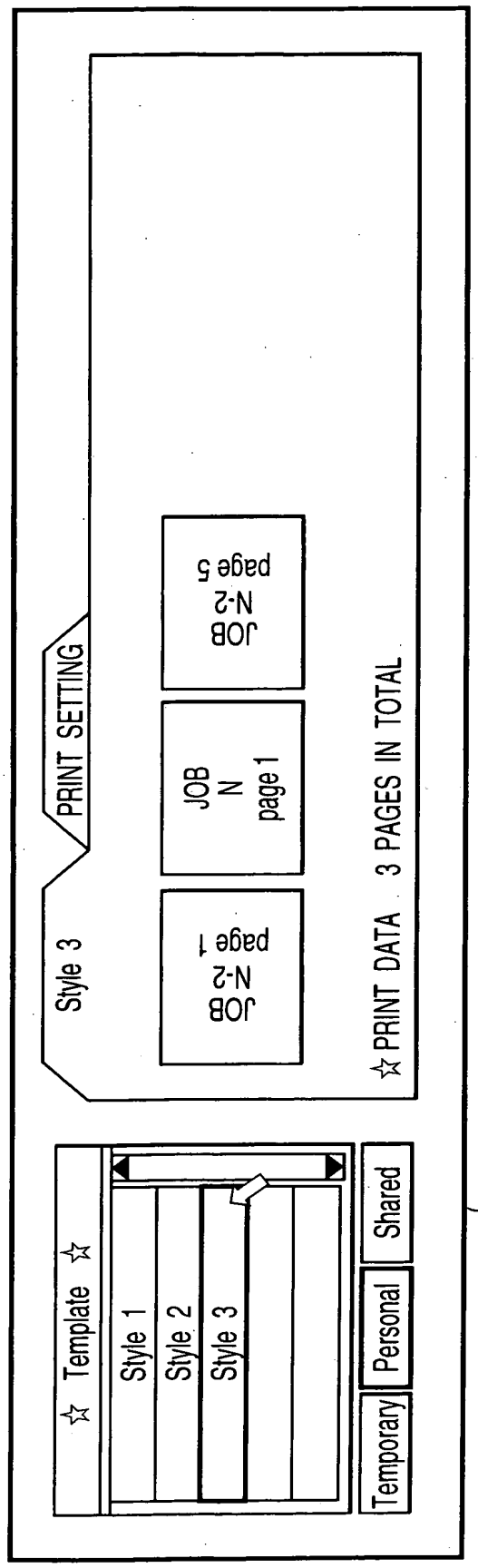
☆ Template ☆
Style 1
Style 2
Style 3
Temporary
Personal
Shared
Style 3
PRINT SETTING
JOB
N-2
page 1
JOB
N
page 1
JOB
N-2
page 5
☆ PRINT DATA 3 PAGES IN TOTAL
4

FIG. 9

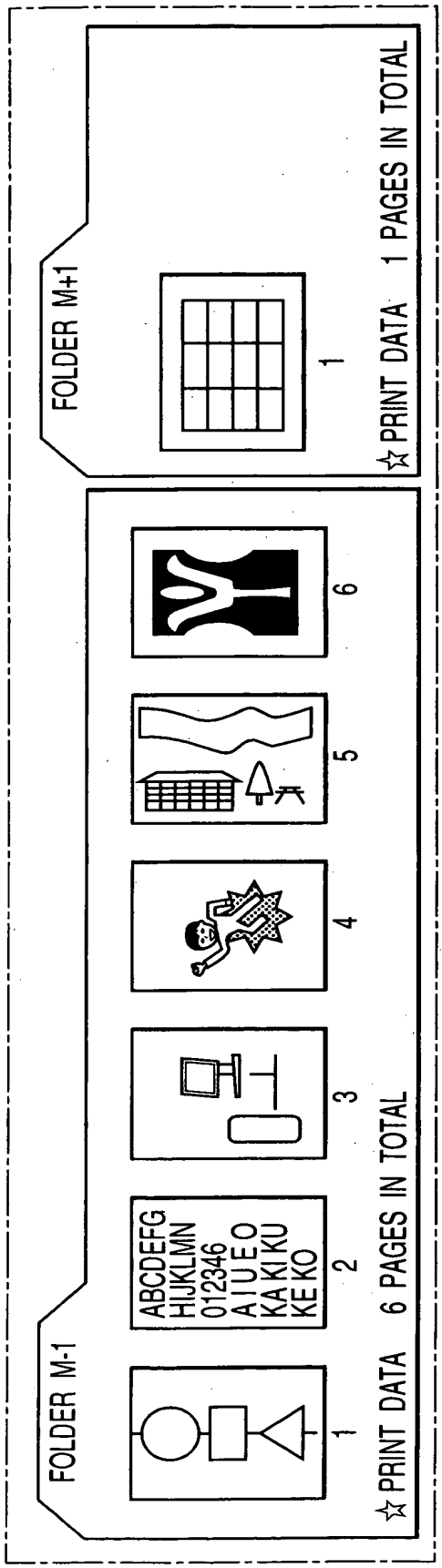
FOLDER M-1
1
ABCDEFG
HIJKLMN
012346
AIUEO
KAKIKU
KEKO
2
3
4
5
6
☆ PRINT DATA 6 PAGES IN TOTAL
FOLDER M+1
1
☆ PRINT DATA 1 PAGES IN TOTAL

FIG. 13

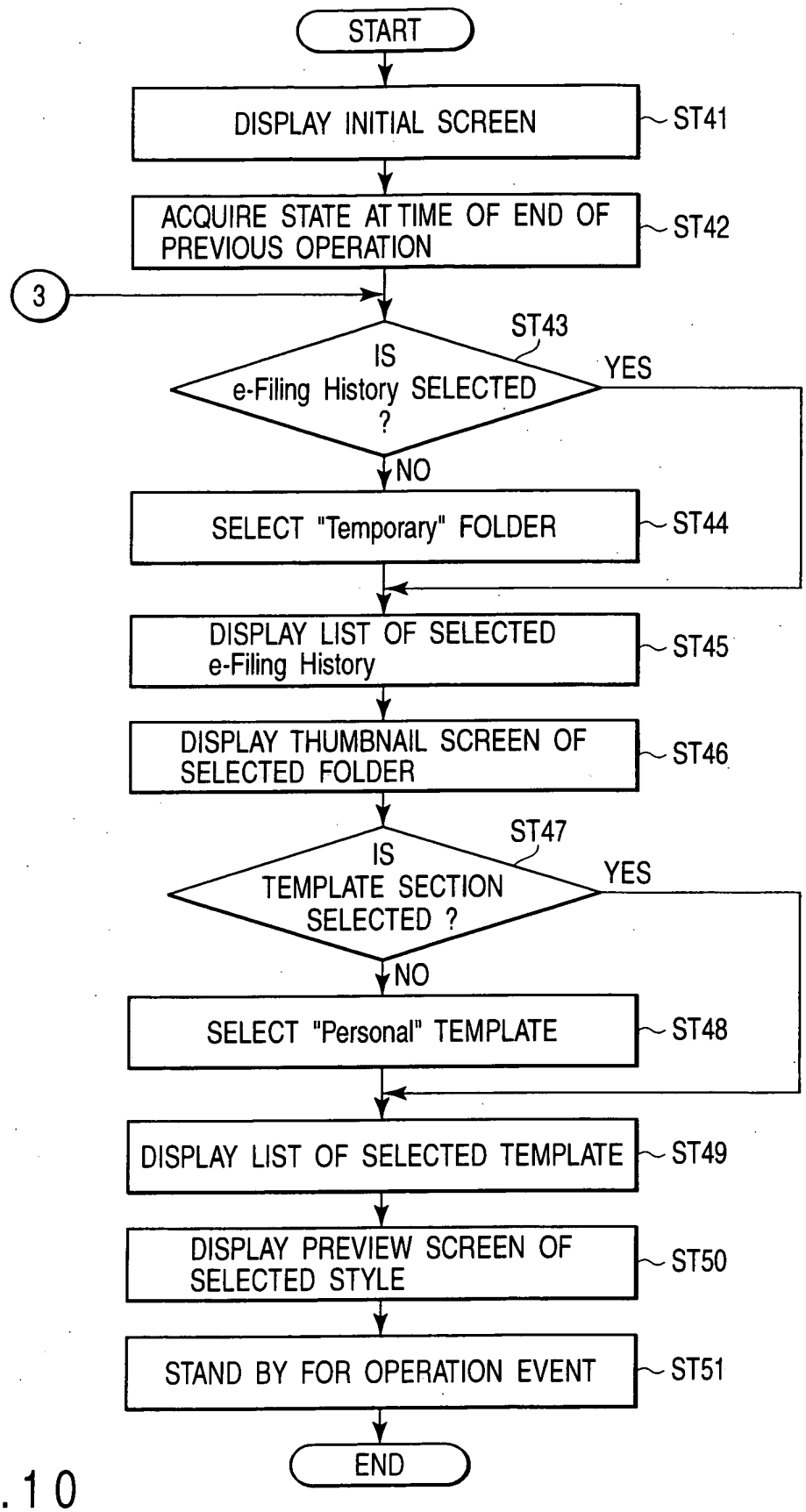
START
DISPLAY INITIAL SCREEN
ST41
ACQUIRE STATE AT TIME OF END OF PREVIOUS OPERATION
ST42
3
ST43
IS e-Filing History SELECTED ?
YES
NO
SELECT "Temporary" FOLDER
ST44
DISPLAY LIST OF SELECTED e-Filing History
ST45
DISPLAY THUMBNAIL SCREEN OF SELECTED FOLDER
ST46
ST47
IS TEMPLATE SECTION SELECTED ?
YES
NO
SELECT "Personal" TEMPLATE
ST48
DISPLAY LIST OF SELECTED TEMPLATE
ST49
DISPLAY PREVIEW SCREEN OF SELECTED STYLE
ST50
STAND BY FOR OPERATION EVENT
ST51
END

FIG. 10

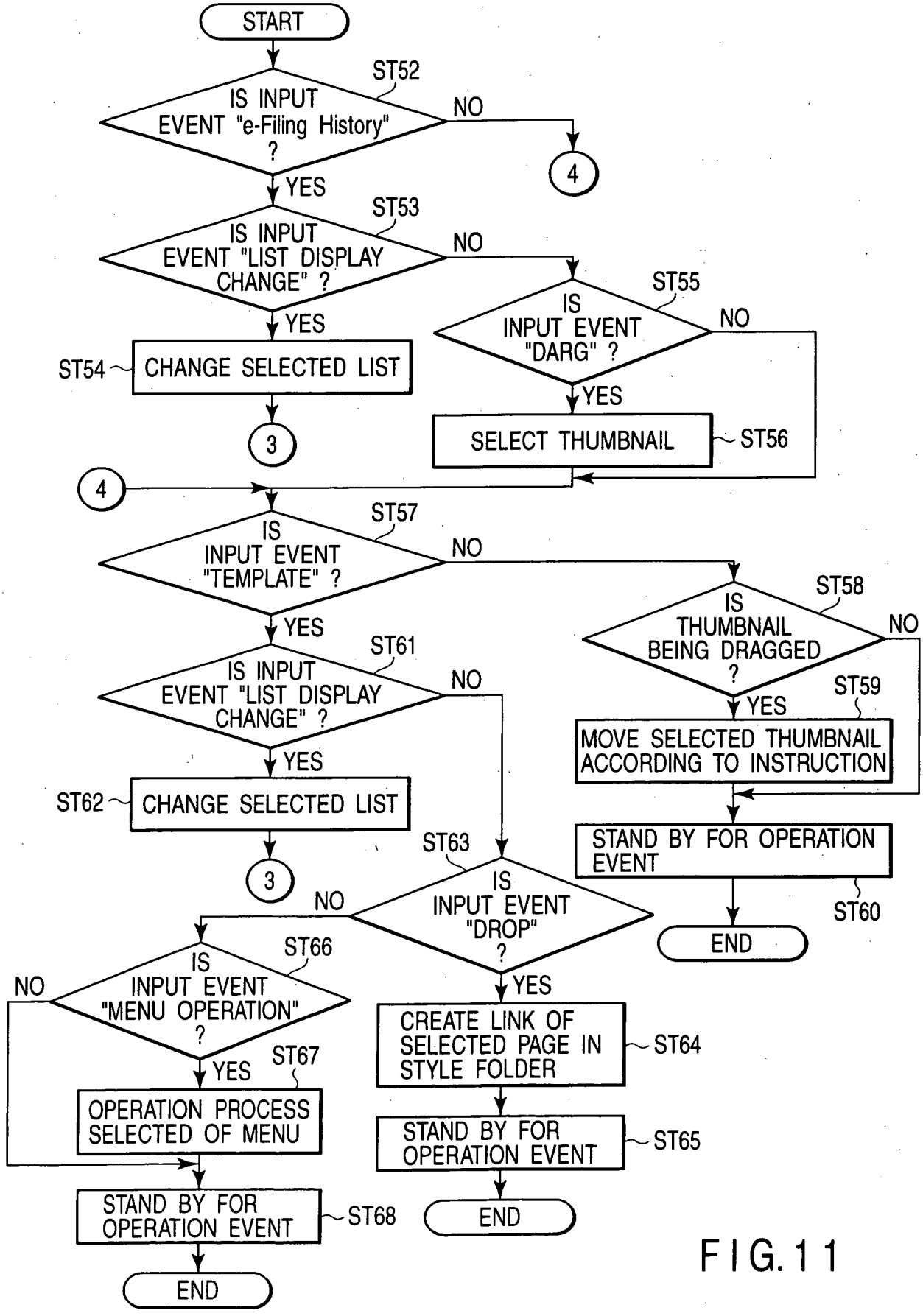
START
ST52
IS INPUT EVENT "e-Filing History" ?
NO
4
YES
ST53
IS INPUT EVENT "LIST DISPLAY CHANGE" ?
NO
YES
ST54
CHANGE SELECTED LIST
3
ST55
IS INPUT EVENT "DARG" ?
NO
YES
SELECT THUMBNAIL
ST56
4
ST57
IS INPUT EVENT "TEMPLATE" ?
NO
YES
ST58
IS THUMBNAIL BEING DRAGGED ?
NO
YES
ST59
MOVE SELECTED THUMBNAIL ACCORDING TO INSTRUCTION
ST61
IS INPUT EVENT "LIST DISPLAY CHANGE" ?
NO
YES
ST62
CHANGE SELECTED LIST
3
STAND BY FOR OPERATION EVENT
ST60
END
ST63
IS INPUT EVENT "DROP" ?
NO
YES
ST66
IS INPUT EVENT "MENU OPERATION" ?
NO
YES
ST67
OPERATION PROCESS SELECTED OF MENU
CREATE LINK OF SELECTED PAGE IN STYLE FOLDER
ST64
STAND BY FOR OPERATION EVENT
ST65
END
STAND BY FOR OPERATION EVENT
ST68
END

FIG. 11

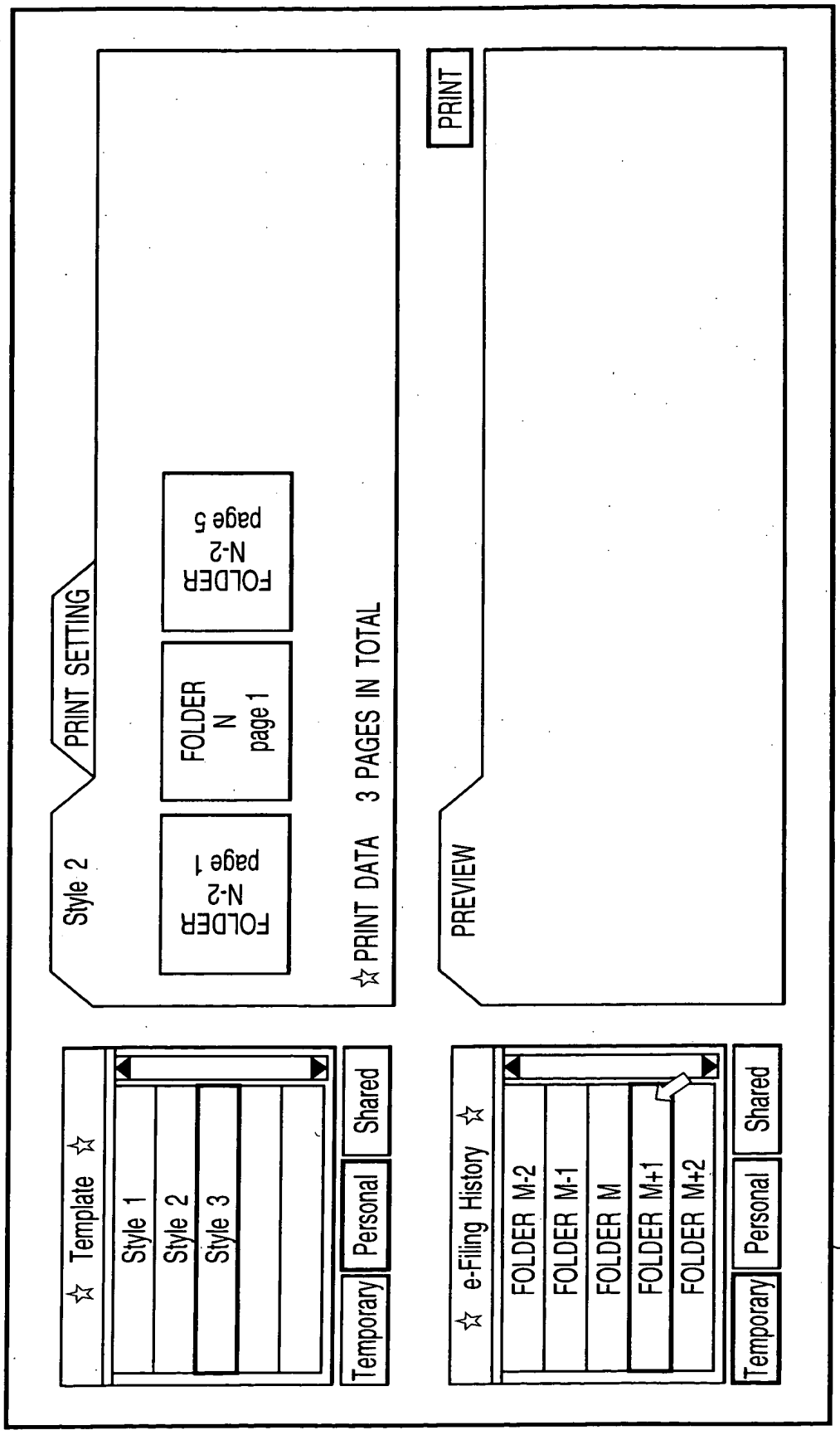
PRINT SETTING
Style 2
FOLDER N-2 page 5
FOLDER N page 1
FOLDER N-2 page 1
☆PRINT DATA 3 PAGES IN TOTAL
PRINT
PREVIEW
☆ Template ☆
Style 1
Style 2
Style 3
Temporary
Personal
Shared
☆ e-Filing History ☆
FOLDER M-2
FOLDER M-1
FOLDER M
FOLDER M+1
FOLDER M+2
Temporary
Personal
Shared
4

FIG.12

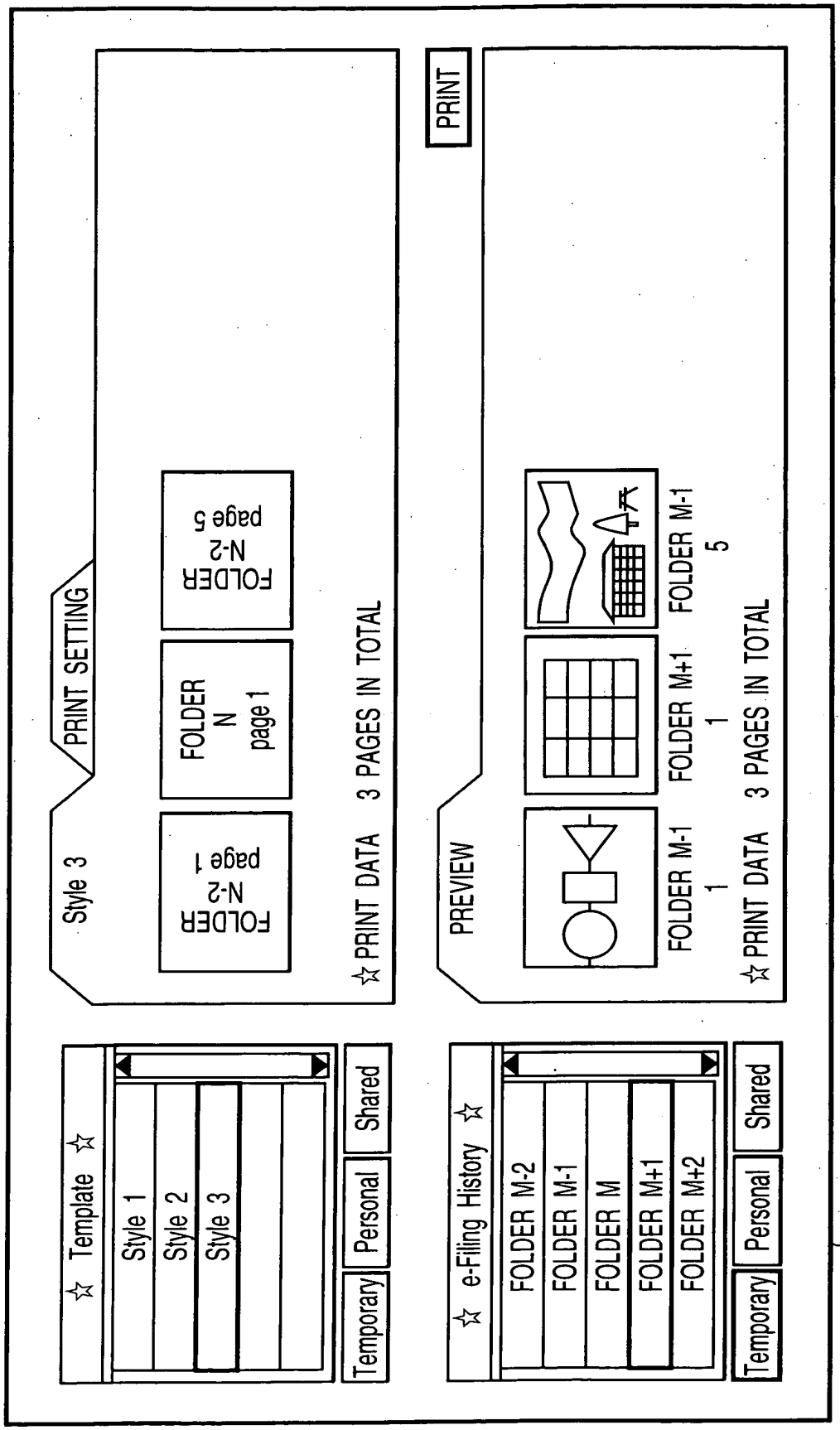
PRINT SETTING
Style 3
FOLDER N-2 page 5
FOLDER N page 1
FOLDER N-2 page 1
☆ PRINT DATA 3 PAGES IN TOTAL
PRINT
PREVIEW
FOLDER M-1 1
FOLDER M+1 1
FOLDER M-1 5
☆ PRINT DATA 3 PAGES IN TOTAL
☆ Template ☆
Style 1
Style 2
Style 3
Temporary
Personal
Shared
☆ e-Filing History ☆
FOLDER M-2
FOLDER M-1
FOLDER M
FOLDER M+1
FOLDER M+2
Temporary
Personal
Shared
4

FIG. 14

Title: PRINTING SYSTEM, METHOD OF CONTROLLING PRINTING AND PROGRAM FOR USE IN PRINTING SYSTEMS
Inventor(s): Takahiro HAGIWARA
Appl. No.: 10/800,634
REPLACEMENT SHEET

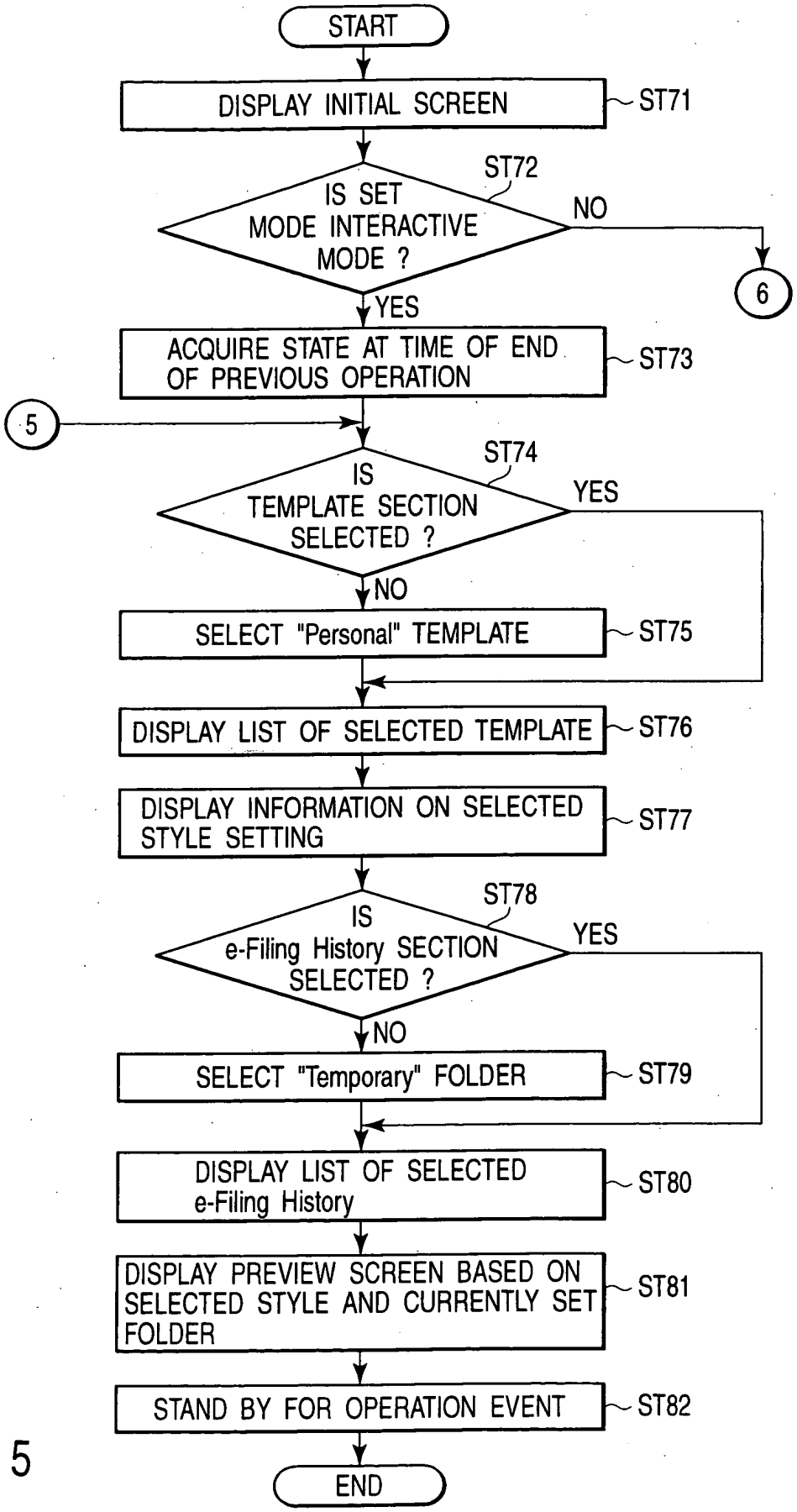

FIG. 15

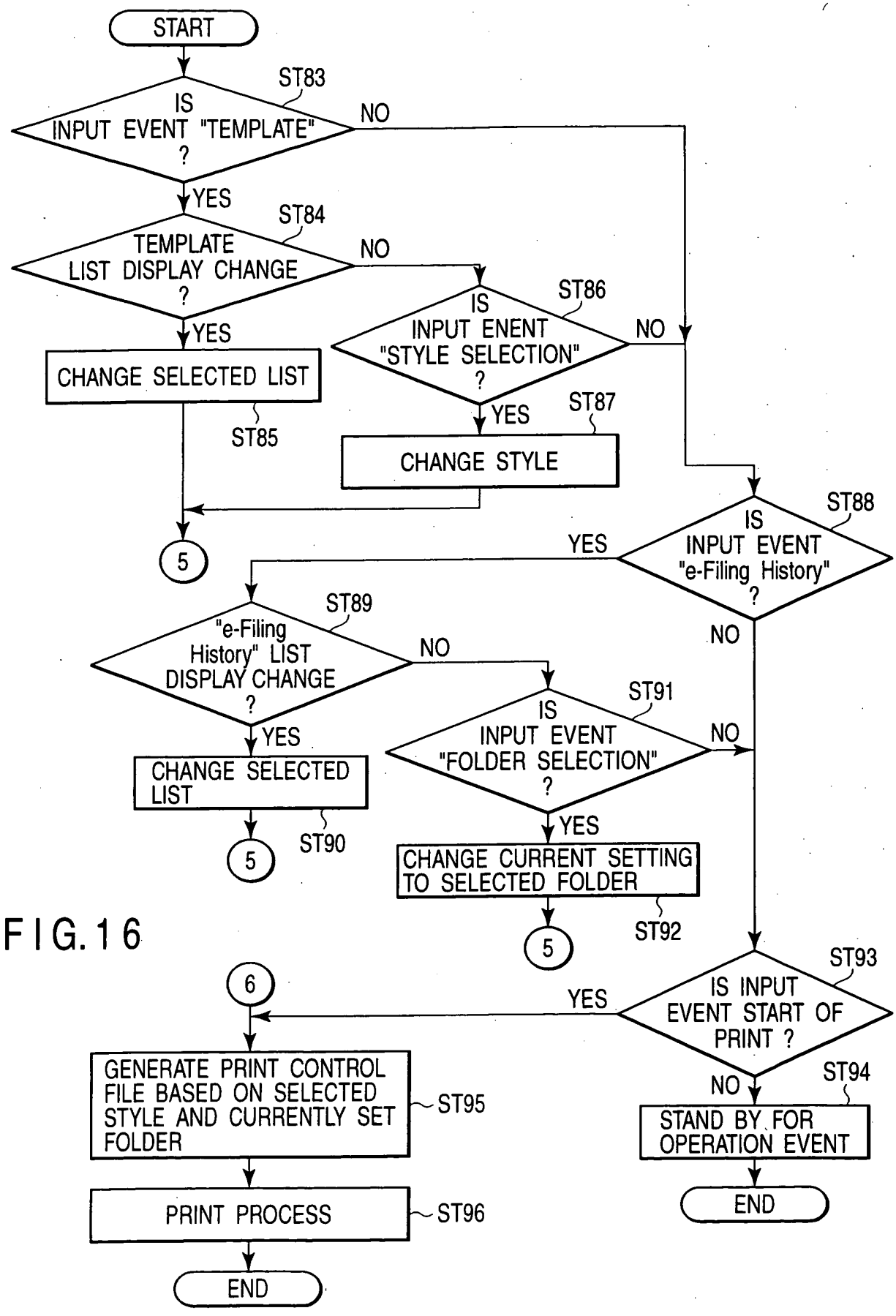
START
ST83
IS INPUT EVENT "TEMPLATE" ?
NO
YES
ST84
TEMPLATE LIST DISPLAY CHANGE ?
NO
YES
CHANGE SELECTED LIST
ST85
ST86
IS INPUT ENENT "STYLE SELECTION" ?
NO
YES
ST87
CHANGE STYLE
5
ST88
IS INPUT EVENT "e-Filing History" ?
YES
NO
ST89
"e-Filing History" LIST DISPLAY CHANGE ?
NO
YES
CHANGE SELECTED LIST
ST90
5
ST91
IS INPUT EVENT "FOLDER SELECTION" ?
NO
YES
CHANGE CURRENT SETTING TO SELECTED FOLDER
ST92
5
6
ST93
IS INPUT EVENT START OF PRINT ?
YES
NO
ST94
STAND BY FOR OPERATION EVENT
END
GENERATE PRINT CONTROL FILE BASED ON SELECTED STYLE AND CURRENTLY SET FOLDER
ST95
PRINT PROCESS
ST96
END

FIG. 16

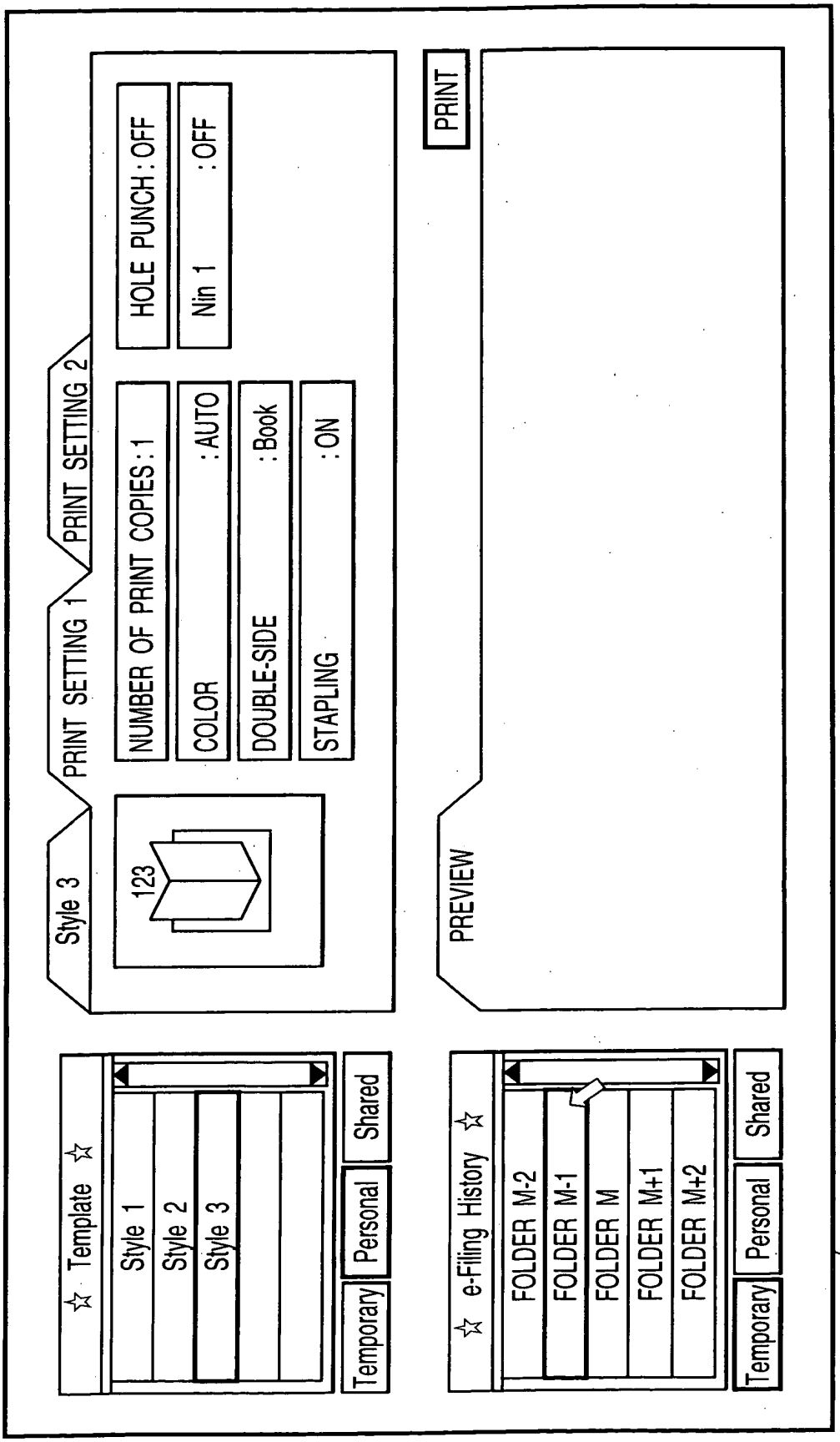
Style 3
PRINT SETTING 1
PRINT SETTING 2
123
NUMBER OF PRINT COPIES : 1
COLOR : AUTO
DOUBLE-SIDE : Book
STAPLING : ON
HOLE PUNCH : OFF
Nin 1 : OFF
PRINT
PREVIEW
☆ Template ☆
Style 1
Style 2
Style 3
Temporary
Personal
Shared
☆ e-Filing History ☆
FOLDER M-2
FOLDER M-1
FOLDER M
FOLDER M+1
FOLDER M+2
Temporary
Personal
Shared
4

FIG.17

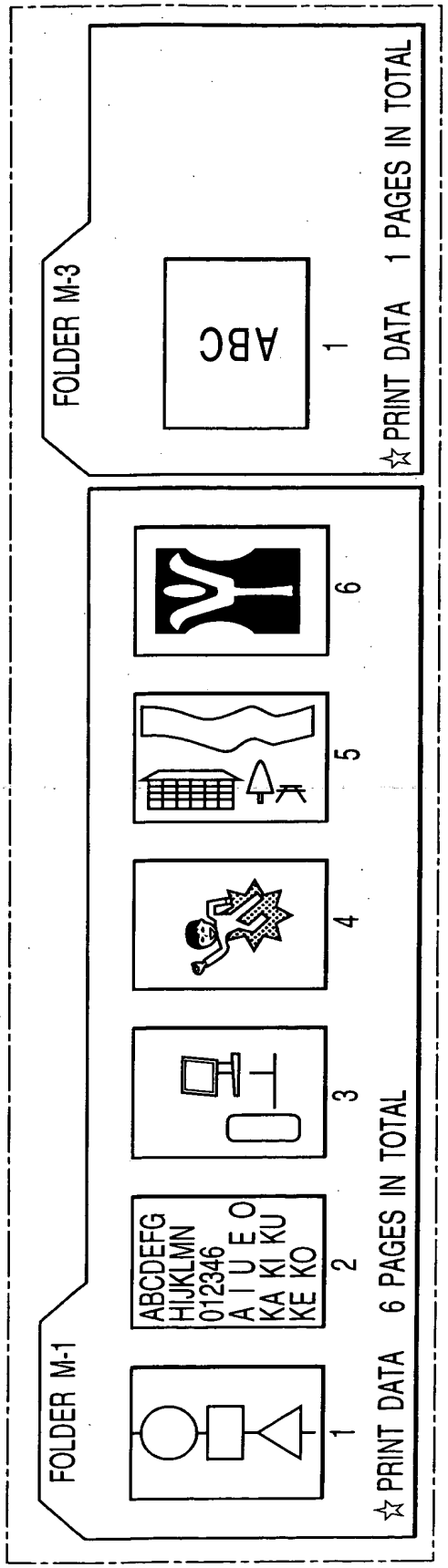
FOLDER M-1
ABCDEFG
HIJKLMN
012346
A I U E O
KA KI KU
KE KO
1
2
3
4
5
6
☆PRINT DATA 6 PAGES IN TOTAL
FOLDER M-3
ABC
1
☆PRINT DATA 1 PAGES IN TOTAL

FIG.18

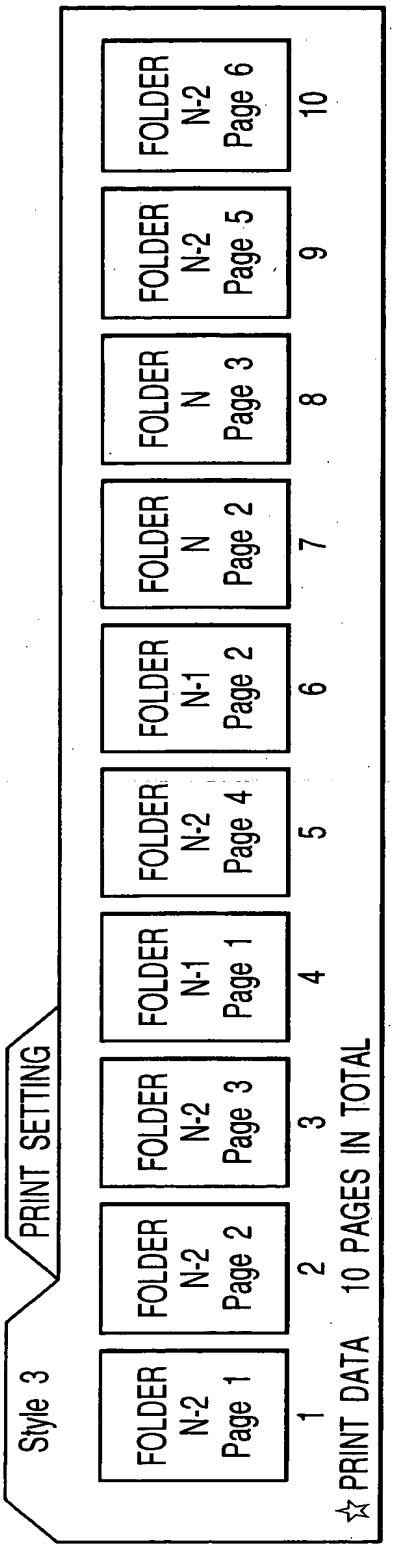
Style 3
PRINT SETTING
FOLDER N-2 Page 1
FOLDER N-2 Page 2
FOLDER N-2 Page 3
FOLDER N-1 Page 1
FOLDER N-2 Page 4
FOLDER N-1 Page 2
FOLDER N Page 2
FOLDER N Page 3
FOLDER N-2 Page 5
FOLDER N-2 Page 6
1
2
3
4
5
6
7
8
9
10
☆PRINT DATA 10 PAGES IN TOTAL

FIG.21

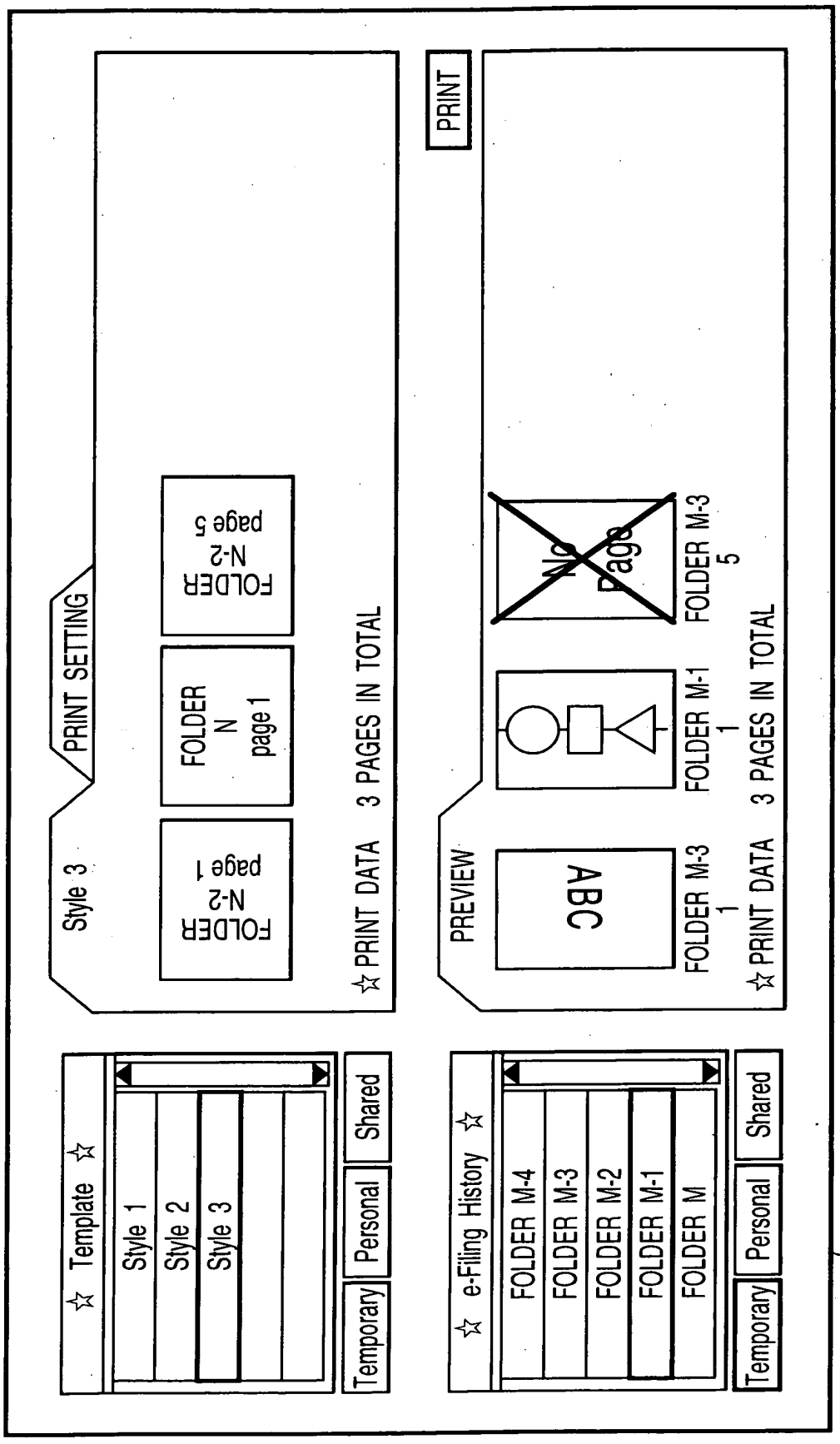
PRINT SETTING
Style 3
FOLDER N-2 page 5
FOLDER N page 1
FOLDER N-2 page 1
☆PRINT DATA 3 PAGES IN TOTAL
PRINT
PREVIEW
No Page
ABC
FOLDER M-3 1
FOLDER M-1 1
FOLDER M-3 5
☆PRINT DATA 3 PAGES IN TOTAL
☆ Template ☆
Style 1
Style 2
Style 3
Temporary
Personal
Shared
☆ e-Filing History ☆
FOLDER M-4
FOLDER M-3
FOLDER M-2
FOLDER M-1
FOLDER M
Temporary
Personal
Shared
4

FIG. 19

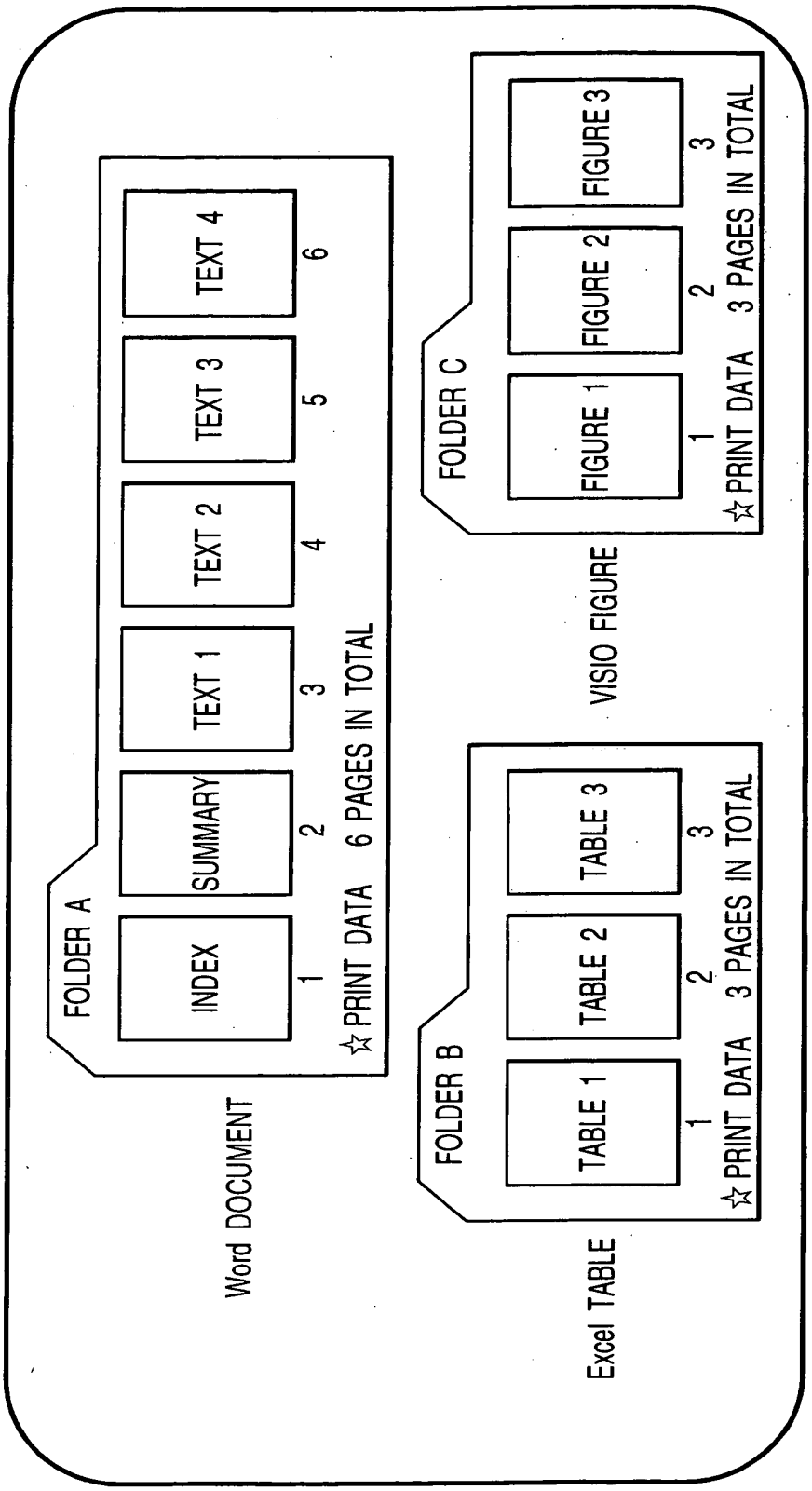
Word DOCUMENT
FOLDER A
INDEX
SUMMARY
TEXT 1
TEXT 2
TEXT 3
TEXT 4
1
2
3
4
5
6
☆PRINT DATA 6 PAGES IN TOTAL
VISIO FIGURE
FOLDER C
FIGURE 1
FIGURE 2
FIGURE 3
1
2
3
☆PRINT DATA 3 PAGES IN TOTAL
Excel TABLE
FOLDER B
TABLE 1
TABLE 2
TABLE 3
1
2
3
☆PRINT DATA 3 PAGES IN TOTAL

FIG.20

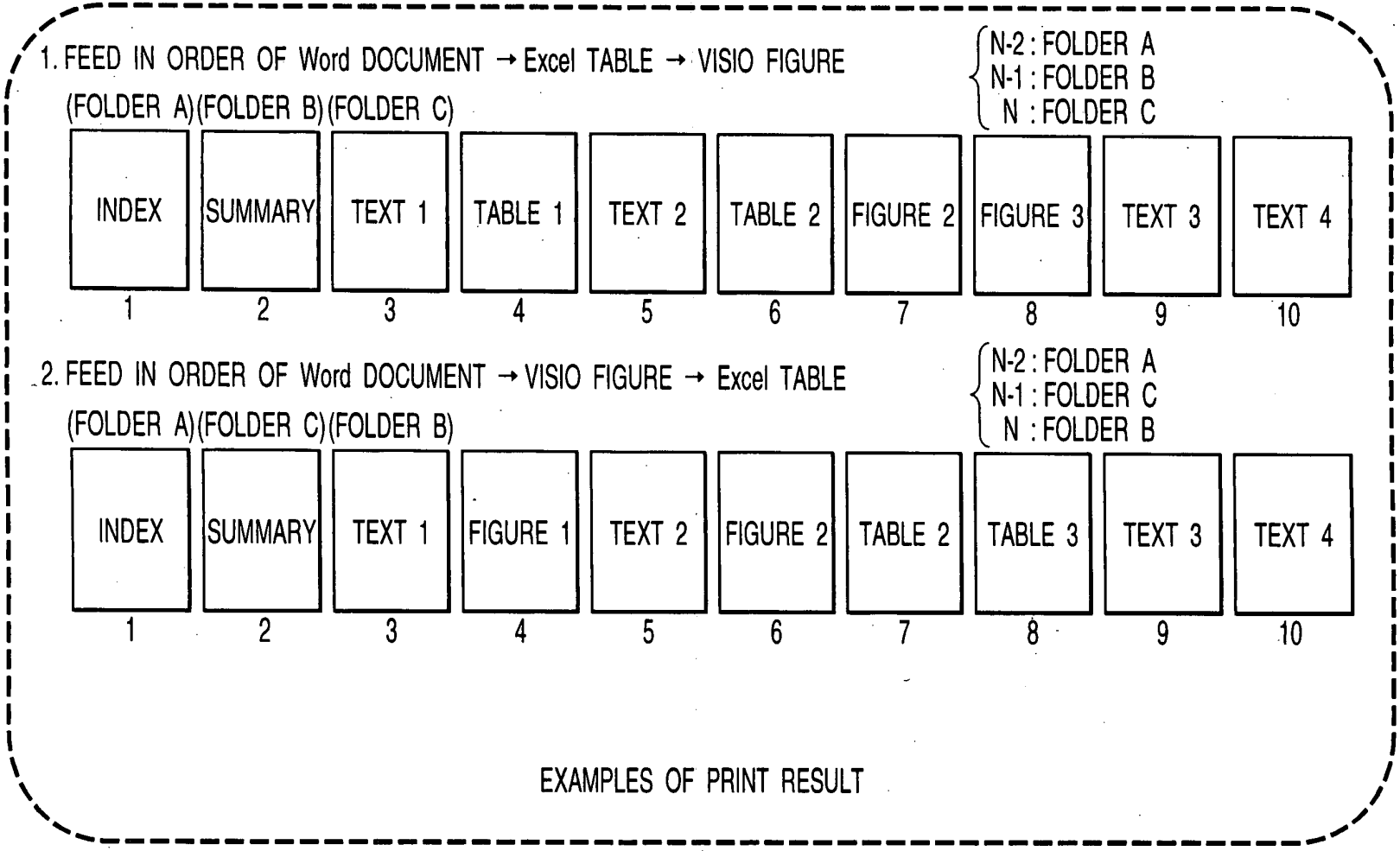

FIG.22

Title: PRINTING SYSTEM, METHOD OF CONTROLLING PRINTING AND PROGRAM FOR USE IN PRINTING SYSTEMS
Inventor(s): Takahiro HAGIWARA
Appl. No.: 10/800,634
REPLACEMENT SHEET

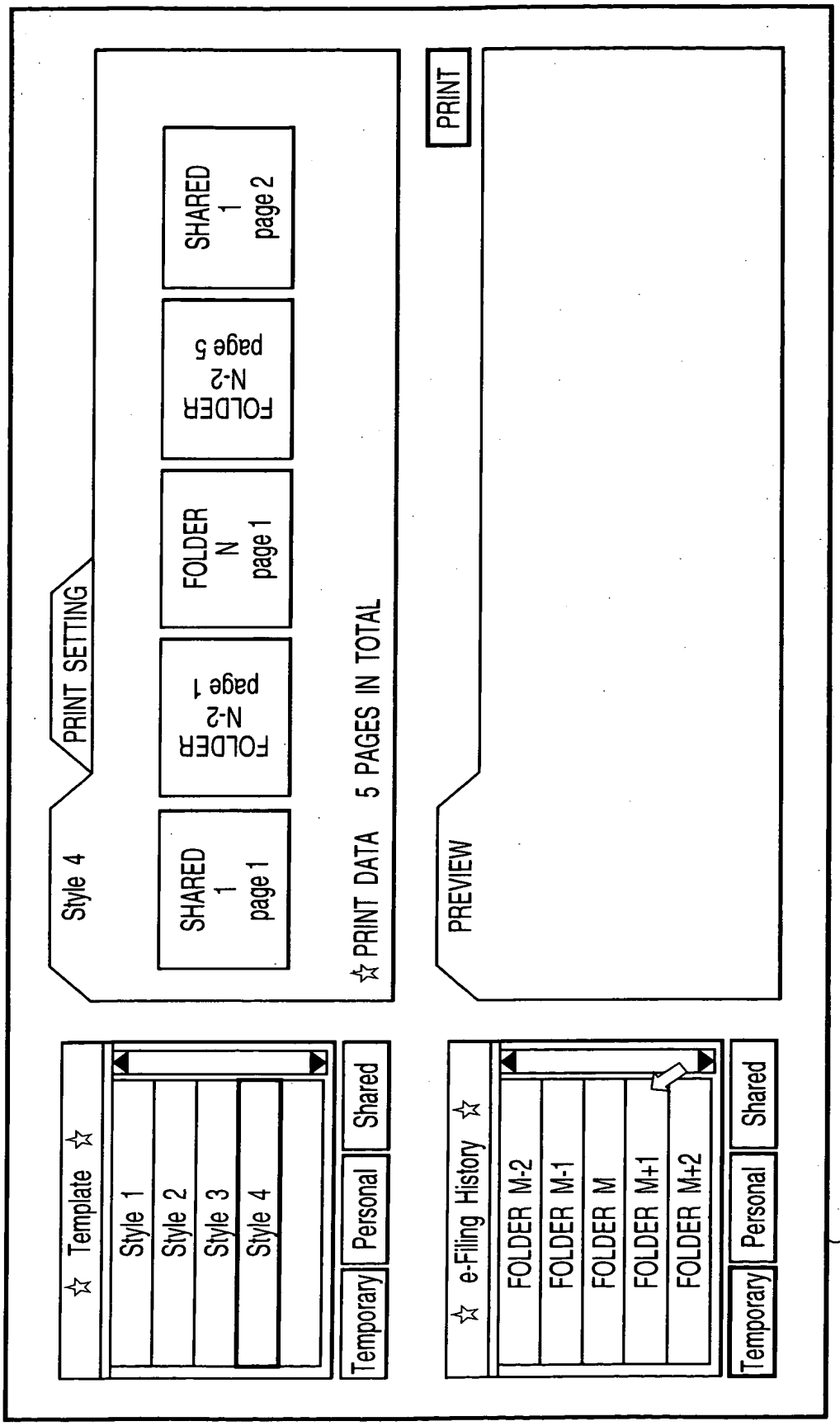
PRINT SETTING
Style 4
SHARED 1 page 1
FOLDER N-2 page 1
FOLDER N page 1
FOLDER N-2 page 5
SHARED 1 page 2
☆ PRINT DATA 5 PAGES IN TOTAL
PRINT
PREVIEW
☆ Template ☆
Style 1
Style 2
Style 3
Style 4
Temporary
Personal
Shared
☆ e-Filing History ☆
FOLDER M-2
FOLDER M-1
FOLDER M
FOLDER M+1
FOLDER M+2
Temporary
Personal
Shared
4

FIG.23

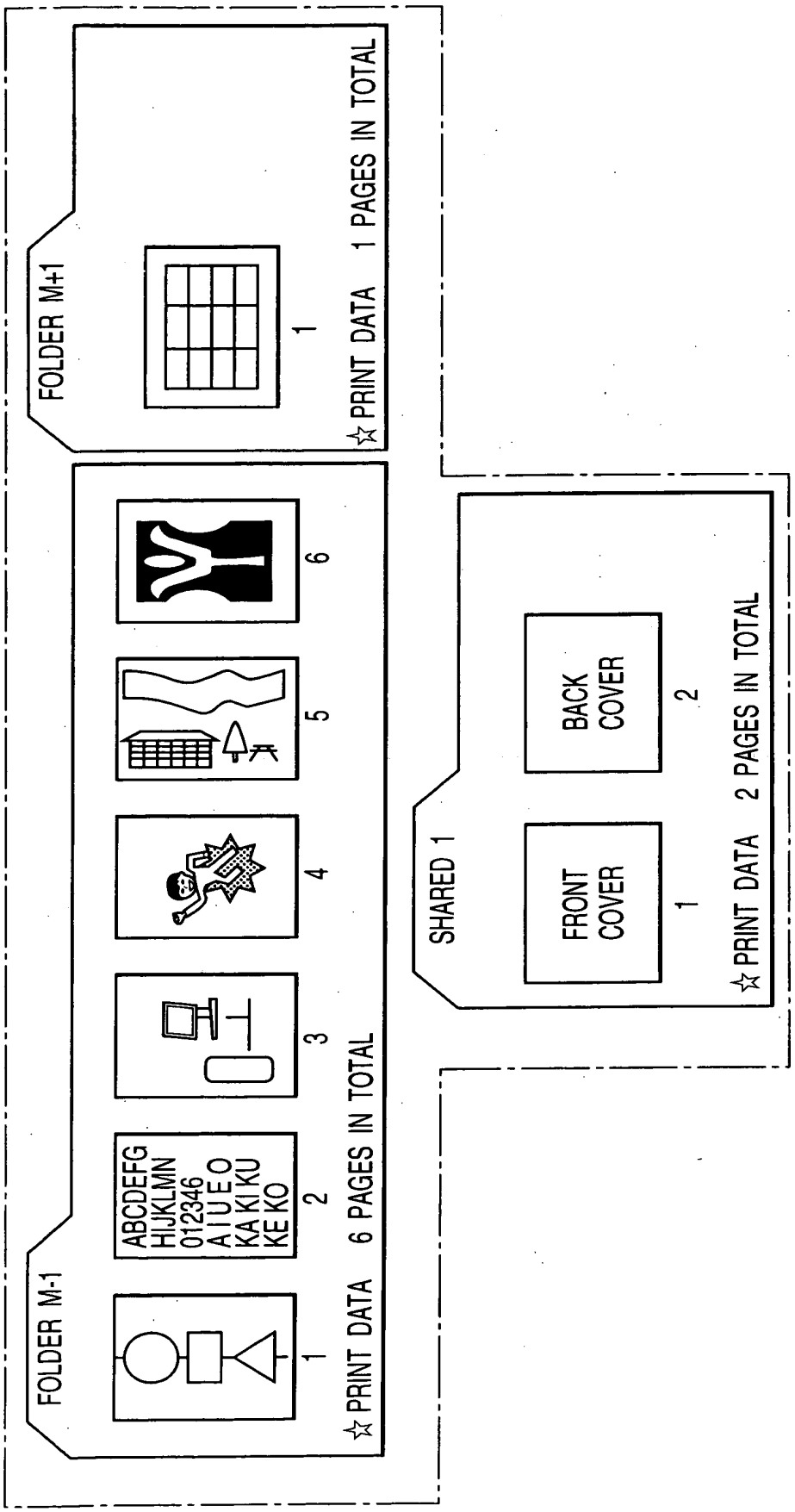
FOLDER M+1
1
☆PRINT DATA 1 PAGES IN TOTAL
FOLDER M-1
1
ABCDEFG
HIJKLMN
012346
AIUEO
KAKIKU
KEKO
2
3
4
5
6
☆PRINT DATA 6 PAGES IN TOTAL
SHARED 1
FRONT COVER
1
BACK COVER
2
☆PRINT DATA 2 PAGES IN TOTAL

FIG.24

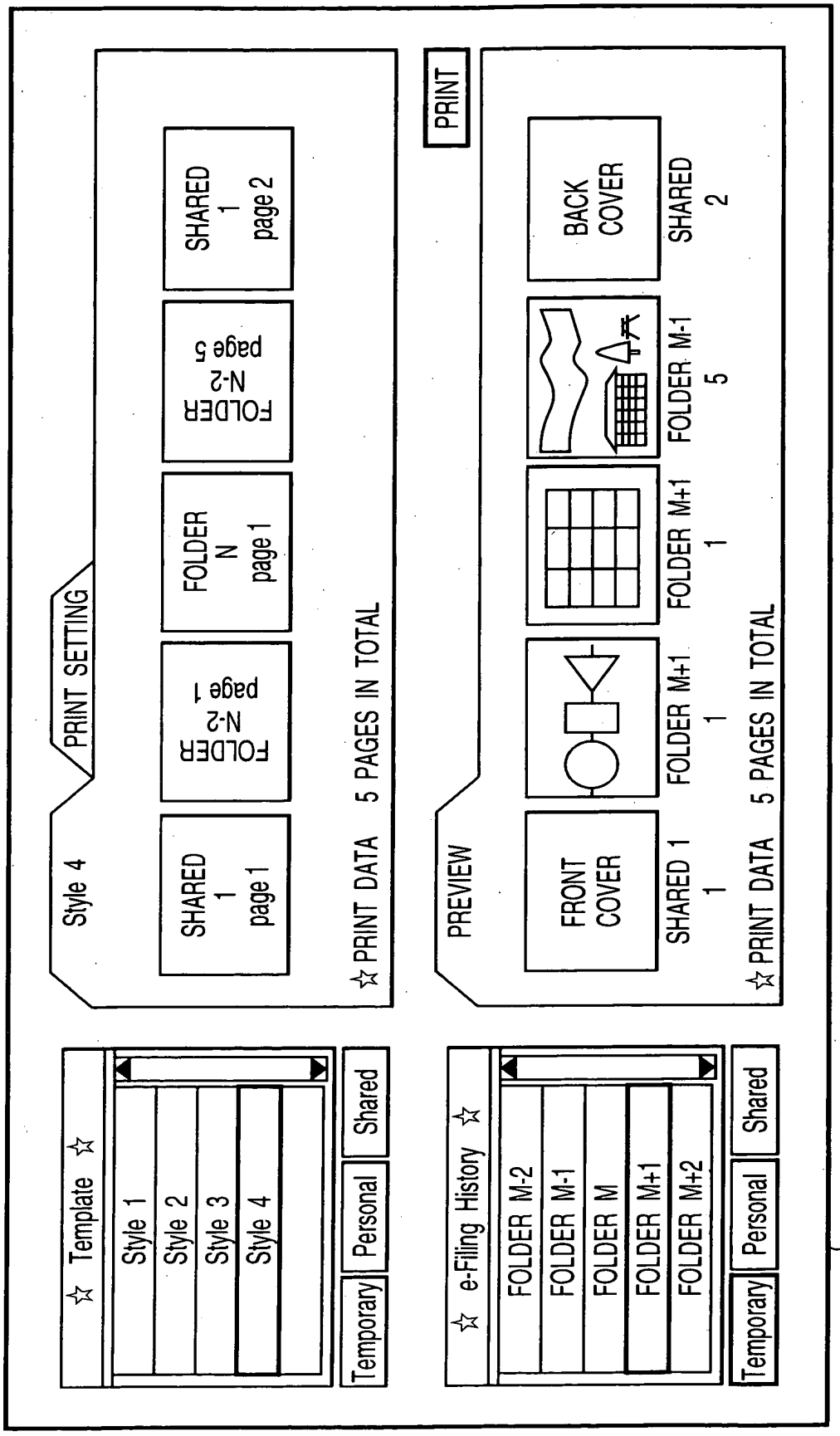
☆ Template ☆
Style 1
Style 2
Style 3
Style 4
Temporary
Personal
Shared
☆ e-Filing History ☆
FOLDER M-2
FOLDER M-1
FOLDER M
FOLDER M+1
FOLDER M+2
Temporary
Personal
Shared
Style 4
PRINT SETTING
SHARED 1 page 1
FOLDER N-2 page 1
FOLDER N page 1
FOLDER N-2 page 5
SHARED 1 page 2
☆ PRINT DATA 5 PAGES IN TOTAL
PRINT
PREVIEW
FRONT COVER
SHARED 1 1
FOLDER M+1 1
FOLDER M+1 1
FOLDER M-1 5
BACK COVER
SHARED 2
☆ PRINT DATA 5 PAGES IN TOTAL
4

FIG.25

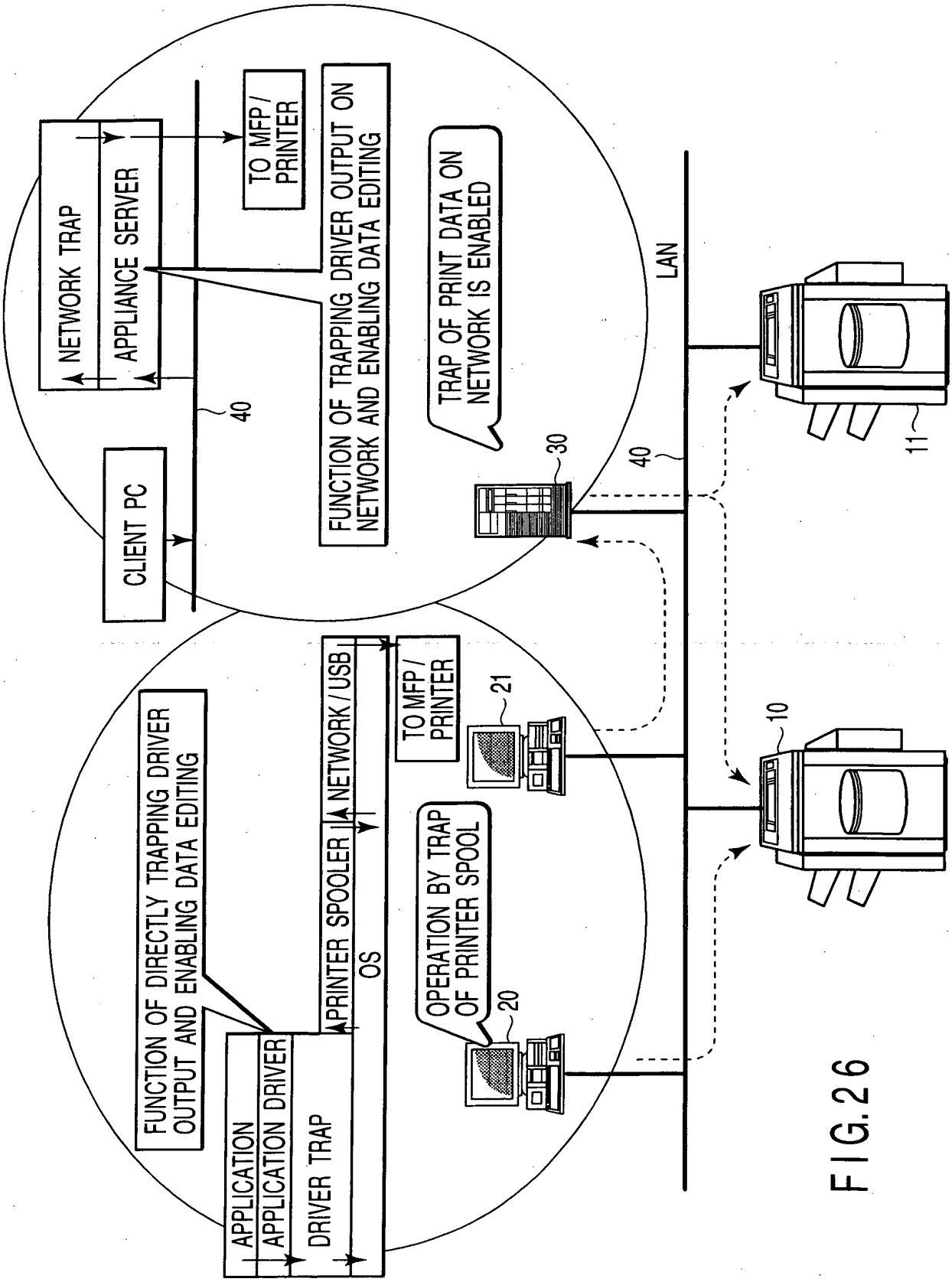
NETWORK TRAP
APPLIANCE SERVER
TO MFP / PRINTER
FUNCTION OF TRAPPING DRIVER OUTPUT ON NETWORK AND ENABLING DATA EDITING
TRAP OF PRINT DATA ON NETWORK IS ENABLED
CLIENT PC
40
30
LAN
11
10
21
20
FUNCTION OF DIRECTLY TRAPPING DRIVER OUTPUT AND ENABLING DATA EDITING
APPLICATION
APPLICATION DRIVER
DRIVER TRAP
PRINTER SPOOLER
NETWORK / USB
OS
TO MFP / PRINTER
OPERATION BY TRAP OF PRINTER SPOOL

FIG.26

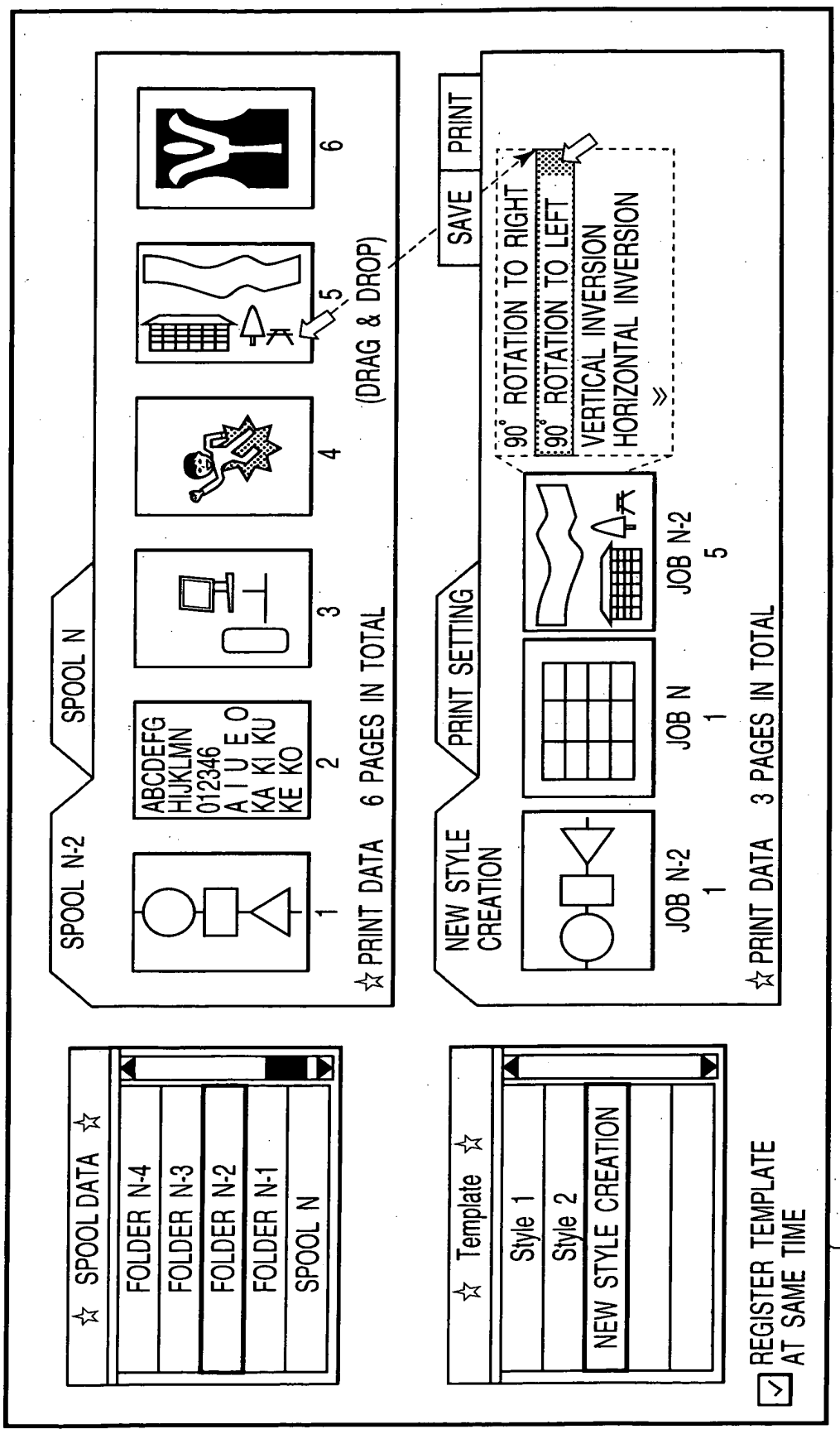
SPOOL N-2
SPOOL N
ABCDEFG
HIJKLMN
012346
A I U E O
KA KI KU
KE KO
1
2
3
4
5
6
☆PRINT DATA 6 PAGES IN TOTAL
(DRAG & DROP)
SAVE
PRINT
NEW STYLE
CREATION
PRINT SETTING
90° ROTATION TO RIGHT
90° ROTATION TO LEFT
VERTICAL INVERSION
HORIZONTAL INVERSION
JOB N-2
1
JOB N
1
JOB N-2
5
☆PRINT DATA 3 PAGES IN TOTAL
☆ SPOOL DATA ☆
FOLDER N-4
FOLDER N-3
FOLDER N-2
FOLDER N-1
SPOOL N
☆ Template ☆
Style 1
Style 2
NEW STYLE CREATION
REGISTER TEMPLATE
AT SAME TIME
4

FIG.27